



THE AIR UNIVERSITY



Think Tank - 16C

Agility is the key to Airpower ©TM



Overview



- Introductions
- Examining the Prompt
- Course of Action
- Ways Forward



Who we are



- Group 3.1

- Capt Brundidge, **Intel**
- Capt Rivera, **Intel**
- Capt Van Timmeren, **Pilot**
- Capt Weiner, **Pilot**
- Capt Chesney, **WSO**
- Capt Regan, **Finance**

- Capt Rathje, **Acquisitions**
- Capt Esplin, **Navigator**
- Capt Boothe, **Logistics**
- Capt Hoxie, **Legal**
- Capt Cho, **Analyst**
- Capt Walker, **Pilot**



Think Tank Question



- **What** does tomorrow's war look like?
- **How** should the USAF O/T/E?
- **Why** focus on these areas of O/T/E?

Adm. James Winnefeld's priorities

1. Survival of the nation
2. Prevention of catastrophic attacks
3. Protection of U.S. economic system
4. Maintain secure, confident, reliable allies
5. Looking after protection of American citizens abroad
6. Protecting universal values and a rule based international order



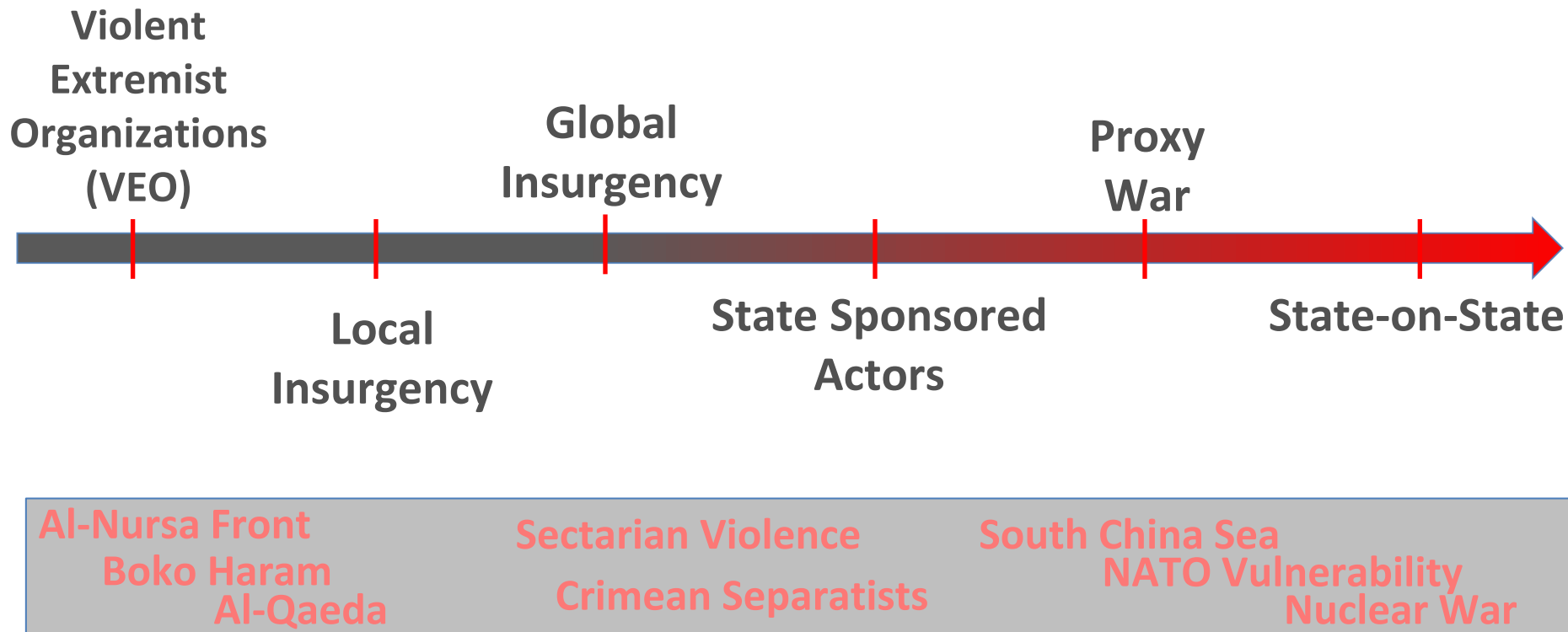
Framing the Question



- Difficult to identify the next conflict
- Current inability to be prepared for all contingencies at all times
- **Therefore, USAF must be able to rapidly respond to any *emergent threat* with the *correctly scaled* capability:**
 - Accurately decipher the emergent threat
 - Procure the capabilities to meet that threat
 - Capabilities must be scalable to meet particular threats



Spectrum Of Warfare

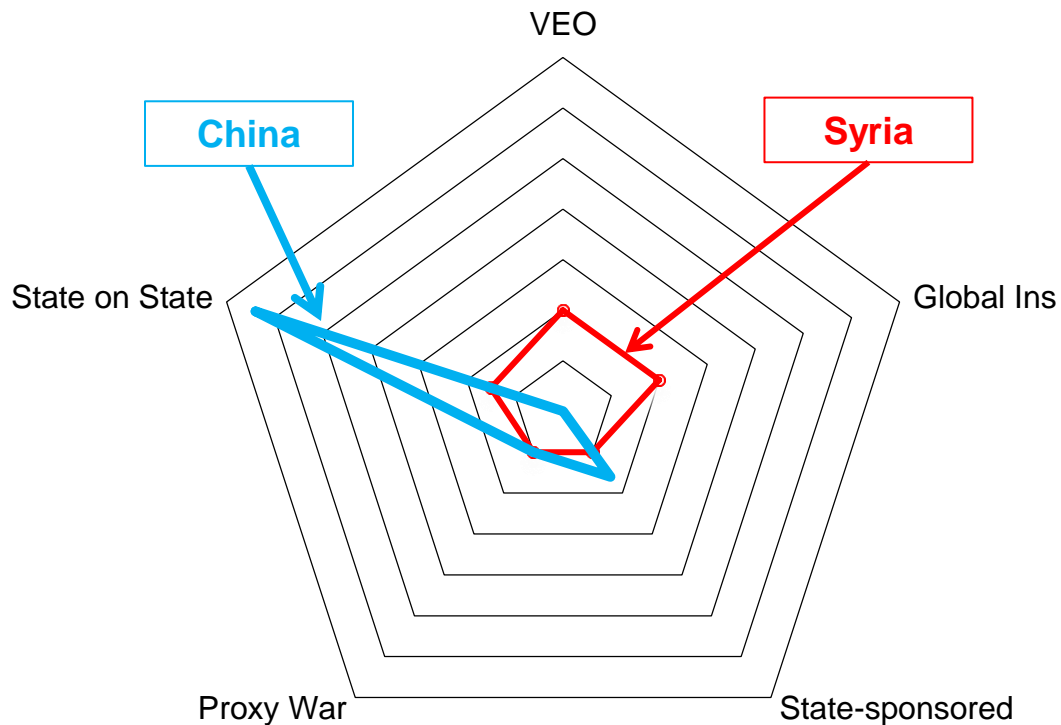
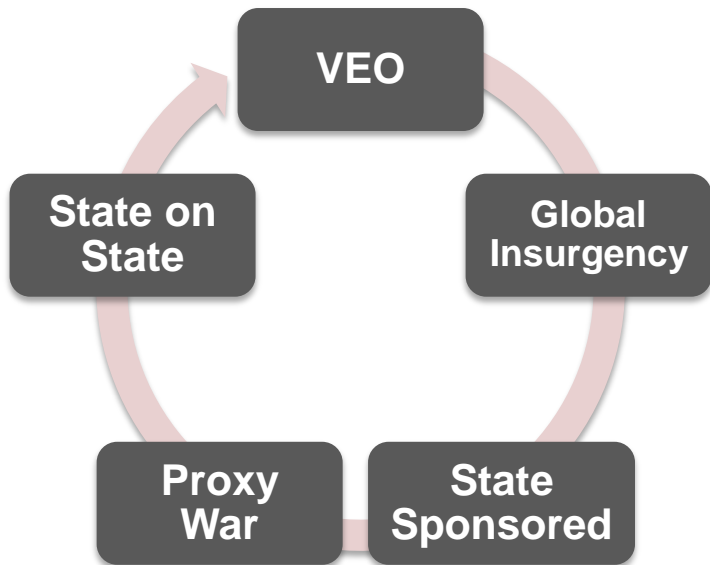




Hybrid War



Conflict Scenarios





How do we O/T/E?



- The AF must invest in agile solutions that rapidly identify and react to the continuum of conflict as well as adjust doctrine to effectively incorporate innovative capabilities

AGILITY



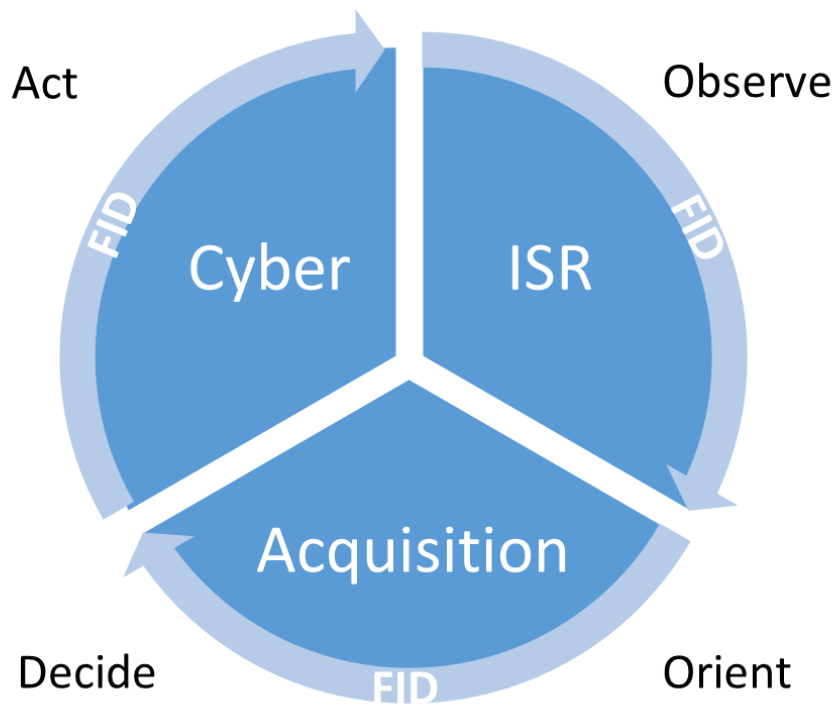
How do we achieve Agility?



- Agility through an integrated, multifaceted approach
 1. Globally integrated ISR/IW
 2. Enhanced cyber roles and capabilities
 3. Rapid acquisitions process
 4. Foreign Internal Defense



Agility



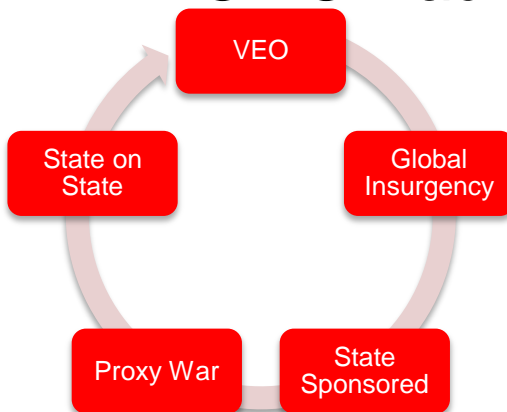


Fused Indications and Warning (I&W) ISR Network



I&W ISR provides **DETECTION** across entire spectrum

Island Building in South China Sea



MBM Strike Libya



Russian Naval Bases in Crimea





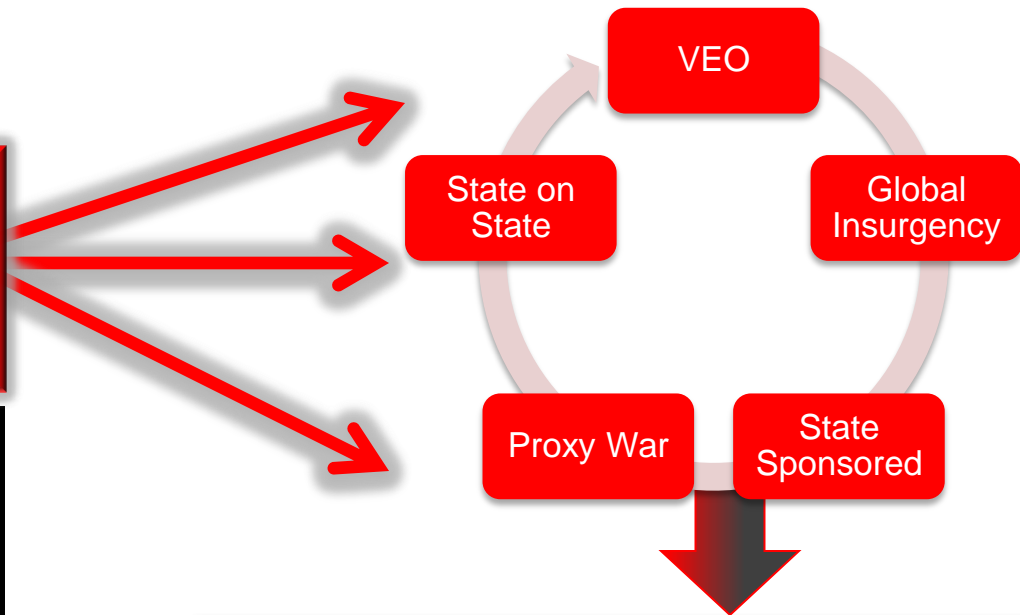
Integrated I&W ISR Network



Detection is Paramount for Warfighting Agility

Provides ability to rapidly:

Identify: Emerging Threats & Vulnerabilities
Validate: Adversary Centers of Gravity
Illuminate: Changing Battlespace
Provide: Strategic, Operational and Tactical SA





Second & Third Order Effects



- Second Order Effect
 - Adversary Advances in Camouflage, Concealment and Deception Tactics, Techniques and Procedures



- Third Order Effect
 - Fused Integrated ISR Network Vulnerable to Cyber Attack
 - Critical Node Adversary Targeting



Agility: Cyber/Electronic Warfare



- Applicable through the entire Spectrum of Conflict
- Phase I/Key to Tomorrow's War
- Increases Agility through efficiency and scalability
 - Lower relative cost
 - Highly adaptable
 - Multi-layered defense
 - Standoff capabilities
 - Stealth



Conceptual Attack

SEQUENCE

Nuclear

**Counter-
Land**

**Counter-
Air**

**Stealth
Bombers**

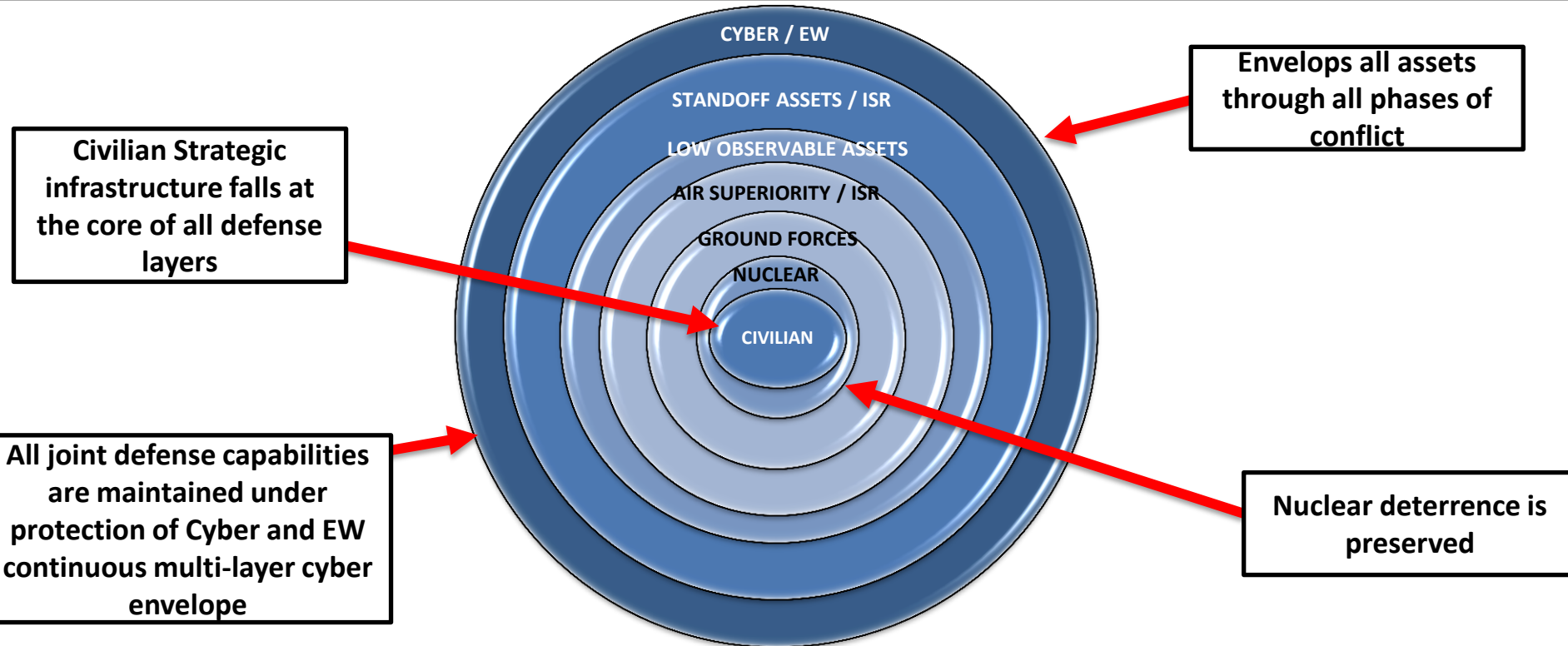
**Cruise
Missiles**

**Cyber/
Electronic
Warfare**

Uninterrupted Cyber/Electronic Warfare



Conceptual Defense





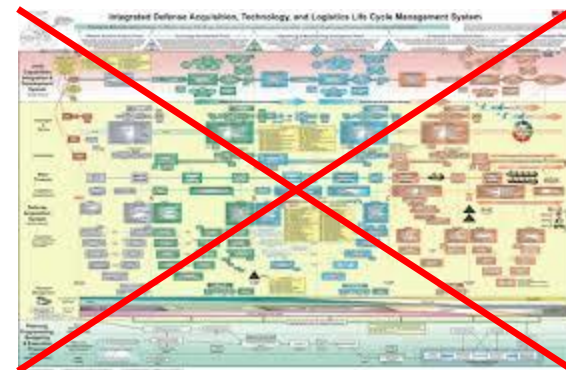
Agility: Acquisition



- We need an agile acquisition process to adapt to emergent threats
 - Organizational Shift
 - Institutional Shift

There were 3 million patents between 1787 and 2000; there have been over 3 million patents since 2000.

- The future requires
 - Reduced expenditures
 - Increased access to R&D
 - Innovation in manufacturing and scalability





Acquisition Agility



- Second order effects
 - Will not have a stockpile of single threat systems
 - Will have to redefine how we translate user requirements



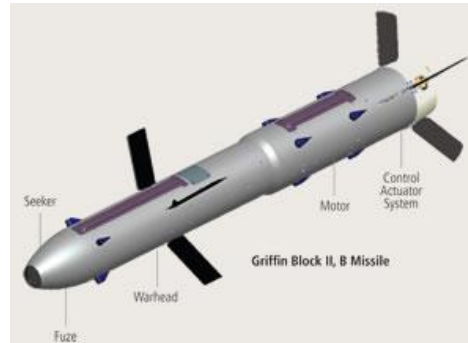
- Third order effects
 - Will have a much larger capability pool that needs to be readily accessible



Example: MC-130W Dragonspear



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Agility: Foreign Internal Defense



- **Persistent “presents” in areas of interest**
 - Routine exercises and interaction
 - Builds capacity and capability
- **Aids agility through:**
 - Sharing risk
 - Insight into emerging regional issues w/ ISR
 - Increased interoperability
 - Airfield familiarization
 - Military assets serving a diplomatic purpose





Second and Third Order Effects



- **Second Order Effects:**
 - Exploitation
 - Avoidable through relationship building
 - Information sharing
 - Differing priorities and capabilities
- **Third Order Effects:**
 - Decreased sphere of influence





Ways Forward



- Cultural Shift to Prioritize Agility
- Doctrinal Changes
 - Invest in Agility, ISR, and Foreign Partnerships
 - Update J-3 series accordingly
- Gaps in Doctrine
 - Phase I Electronic Warfare/Non-kinetic
 - Cyber/Electronic is key to tomorrow's war



Questions?



Questions?